

IN THE CLAIMS

1 1. (Currently Amended) A solid bowl helical conveyor centrifuge having the following:

2 a rotating [pressure tight] drum, which includes a centrifuge space with a rotatable

3 screw;

4 an inlet tube for supplying a material for centrifugation into the centrifuge space;

5 at least one liquid discharge and at least one solids discharge;

6 wherein the liquid discharge and/or the solid discharge having at least one or more

7 openings in rotating part of the solid bowl helical conveyor centrifuge, in particular through

8 openings in the drum wall, wherein the liquid discharge is a scraper disc;

9 wherein a portion including the area of the opening at the solid discharge is covered

10 with a pressure tight housing; and

11 wherein between the housing and the drum at least one gasket is provided.

1 2. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein

2 the gaskets are bearing ring gaskets.

1 3. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein at

2 least one of the openings is in an axial end face of the drum wall.

1 4. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein at

2 least one of the openings is in the circumferential wall of the drum and points radially outward.

1 5. (Currently Amended) The solid bowl helical conveyor centrifuge according to Claim 1,

2 wherein [at least one] the pressure type housing extends over the area of the openings on the

3 drum.

1 6. (Currently Amended) The solid bowl helical conveyor centrifuge according to Claim 1,  
2 wherein the [at least one] the pressure type housing is in the form of a ring.

1 7. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein  
2 the gaskets are arranged between the inside circumference of the axial wall of the housing and  
3 that of the drum.

1 8. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein  
2 the at least one housing is designed with a step and extends over a step of the drum.

1 9. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein  
2 the at least one housing cannot rotate.

1 10. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein at  
2 least one of the openings is a solids discharge in or connected to a tapered section of the drum.

1 11. (Cancelled)

1 12. (Currently Amended) The solid bowl helical conveyor centrifuge according to Claim  
2 [11] 1, wherein the scraper disk is arranged in a chamber of the drum, adjacent to the  
3 centrifuge space.

1 13. (Original) The solid bowl helical conveyor centrifuge according to Claim 12, wherein  
2 the chamber is connected to the drum by at least one opening.

1 14. (Currently Amended) [The solid bowl helical conveyor centrifuge according to Claim  
2 1,] A solid bowl helical conveyor centrifuge having the following:

3        a rotating drum, which includes a centrifuge space with a rotatable screw;  
4        an inlet tube for supplying a material for centrifugation into the centrifuge space;  
5        at least one liquid discharge and at least one solids discharge;  
6        wherein the liquid discharge and/or the solid discharge having at least one or more  
7        openings in rotating part of the solid bowl helical conveyor centrifuge, in particular through  
8        openings in the drum wall;  
9        wherein a portion including the area of the opening at the solid discharge is covered  
10      with a pressure tight housing; [and]  
11      wherein between the housing and the drum at least one gasket is provided; and  
12      wherein at least one of the openings is a liquid discharge in the form of an overflow  
13      opening in the end face of the drum facing away from the solids discharge, whereby this at  
14      least one overflow opening is covered by one of the housings.

1        15. (Currently Amended) ~~[The solid bowl helical conveyor centrifuge according to Claim~~  
2        ~~1,]~~ A solid bowl helical conveyor centrifuge having the following:  
3        a rotating drum, which includes a centrifuge space with a rotatable screw;  
4        an inlet tube for supplying a material for centrifugation into the centrifuge space;  
5        at least one liquid discharge and at least one solids discharge;  
6        wherein the liquid discharge and/or the solid discharge having at least one or more  
7        openings in rotating part of the solid bowl helical conveyor centrifuge, in particular through  
8        openings in the drum wall;  
9        wherein a portion including the area of the opening at the solid discharge is covered  
10      with a pressure tight housing; [and]

11        wherein between the housing and the drum at least one gasket is provided; and  
12        wherein one of the gaskets is in contact with the axial end face of the drum and another  
13        of the gaskets is in contact with a cylindrical drum head, which is adjacent to the outside wall  
14        of the drum.

1        16. (Previously Amended) The solid bowl helical conveyor centrifuge according to Claim  
2        1, wherein one of the gaskets is between the drumhead and stationary scraper disk.

1        17. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein  
2        the at least one housing is pressurized and operates at more than 0.5 bar, preferably 3 to 6 bar.

1        18. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein  
2        the peripheral speed of the gaskets is greater than 30 m/sec.

1        19. (Original) The solid bowl helical conveyor centrifuge according to Claim 1, wherein  
2        the temperature during processing of material for centrifugation in an area which is pressurized  
3        is more than 50°C, preferably 100°C to 160°C.

1        20. (Cancelled)

1        21. (Cancelled)

1        22. (New) The solid bowl helical conveyer centrifuge according to Claim 1, wherein the  
2        liquid discharge is covered with a pressure tight housing.